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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,712	02/06/2002	Leon W.M.M. Terstappen	1477-P01688US2	9650

110 7590 11/01/2005

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EXAMINER	
DO, PENSEE T	
ART UNIT	**PAPER NUMBER**
1641	

DATE MAILED: 11/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/068,712	TERSTAPPEN ET AL.	
	Examiner	Art Unit	
	Pensee T. Do	1641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 August 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3,5-10,12-17,26 and 27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *5-10, 12-17, 27* is/are allowed.

6)☒ Claim(s) *1,3 and 26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Amendment Entry & Claim Status

The amendment filed on August 17, 2005 has been acknowledged and entered.

Claims 1, 3, 5-10, 12-17, 26 and 27 are pending.

Withdrawn Rejection(s)

Rejection under 112, 2nd paragraph is withdrawn herein.

Claim Objections

Claim 1 is objected to because of the following informalities: line 8, recites "particlse", which is incorrectly spelled. Line 10 recites "t o" with a space in-between. Appropriate correction is required.

Maintained Rejection(s)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liberti et al. (US 5,466,574) further in view Kilcoin et al. (US 6,190,619).

Liberti teaches a magnetic separator for generating high gradient magnetic field within a non-magnetic test medium to separate magnetically responsive particles from

the test medium. The magnetic separator comprises magnetic means for generating a high gradient magnetic field in a gap or receptacle into which at least one vessel containing a test medium may be placed. The magnetic field gradient generating means is disposed outside the container and provides an "open" field gradient inside the container, wherein the magnetic field is stronger in the test medium along the internal wall surface of the container than it is in the test medium most distant from the wall. Depending upon the way the test medium being separated, suitable containers include test tubes, microtiter wells, capillary tubes or other non-magnetic cylindrical walled vessels defining a chamber for performing the desired separation. The containers also have one or more non-magnetic baffles spaced apart within the container between two ends. The baffles are dimensioned to restrict the cross-sectional area of the passageway in which the test medium flows through the container to a region surrounding the axis. The baffles are inclined radially downwardly along the direction of flow, to guide toward the wall any magnetically responsive particles coming into contact therewith. The conduit has laterally spaced apart outlet means disposed at the end opposite the inlet. The magnets are arranged so as to define a gap or yoke which serves to enhance the field strength produced by the apparatus. The magnetic field gradient produced by this "multipole" arrangement is characterized by a very strong magnetic field near the edge of the receptacle and virtually no magnetic field at the center of the receptacle. The centers of pole faces are spaced apart by a distance not less than the distance between the faces and said internal surface (see col. 4, line 65-col. 6, line 33; example 1).

However, Liberti fails to disclose a plunger operable to be displaced into said container to confront said interior surface and an optimum annular space through which said test medium may pass.

Kilcoin teaches an apparatus for synthesizing chemical compounds using a plurality of reaction vessels. The apparatus includes suitable agitators, such as plungers, stir bars, balls, beads, columns, disks or the like within the reaction vessels under an external force, e.g. a magnet (see col. 6, lines 54-58). The reaction vessels can be oriented in a circular fashion, with each cassette having a concentric annular shape. (see col. 6, lines 30-33). Regarding the outside dimension of the plunger being similar to but less than the inside dimensions of the interior surface to provide elongated annular space along the length of the interior surface, since the plunger is within the vessel, its dimension must be less than the dimension of the interior surface of the reaction vessel.

Since Kilcoin teaches a plunger displaced in a reaction vessel for stirring or agitating or regulating the flow of the content in the sample with the use of a external force such as a magnetic force and Liberti teaches a device which has a reaction vessel or vessels arranged in a circular configuration and these vessels are surrounded by magnets, it would have been obvious to one of ordinary skill in the art to displace the plunger of Kilcoin in the container of Liberti for regulating the flow of the test medium in the reaction vessels of Liberti so that magnetic particles can adhere to the interior surface more rapidly. It would have been obvious to one of ordinary skill in the art to optimized the space in between the interior surface of the container in Liberti and the

plunger of Kilcoin so that there is enough space for the separation and collection of the magnetic particles which adhere to the interior surface of the container.

Remarks

Claims 5-10, 12-17 and 27 are free of prior arts.

The prior arts fail to teach a magnetic separator with a non-magnetic plunger.

Response to Arguments

Applicant's arguments filed on August 17, 2005 have been fully considered but they are not persuasive.

Applicants have amended the claims to recite the magnetic separator to include "an optimum annular space' and argue that the combined prior arts fail to teach such optimum space.

The optimum space is obvious over the prior arts because one of ordinary skills in the art would find it obvious to optimize such annular space so that substantially all the sample can be contained within such space in order to effectively facilitate complete separation of the magnetic particles from the sample.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pensee T. Do whose telephone number is 571-272-0819. The examiner can normally be reached on Monday-Friday, 7:00-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on 571-272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Pensee T. Do
Patent Examiner
October 18, 2005

LONG V. LE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600
10/21/05